

2132*i* 2116*i*

MODELS



Model 2132*i*
1/32 DIN (48 x 24mm)



Model 2116*i*
1/16 DIN (48 x 48mm)

Indicator and Alarm Units

Ideal for:

- **Temperature indication**
- **4-20mA process inputs**
- **Over-temperature protection**
- **Process value trip unit**

Available in compact 1/32 and 1/16 DIN panel sizes, the 2132*i* and 2116*i* provide accurate measurement and display of temperature and other process variables. A universal input allows selection of nine internally stored thermocouple types. Other input linearisations may be factory downloaded. Linear 4-20mA inputs can be scaled to the desired display range. Keylock and passwords prevent unauthorised access to configuration and alarm settings.

A bright, clear LED display gives good visibility in low and high ambient lighting.

Three internal setpoints are provided. They operate up to two alarm outputs which can be configured as latching or non-latching. A special mode known as 'alarm blocking' is available. In this mode, after power on, the process value must first enter a good state before the alarm becomes active. This is particularly useful for low alarms which can be 'blocked' while the process is warming-up.

Operation is user friendly with tactile buttons.

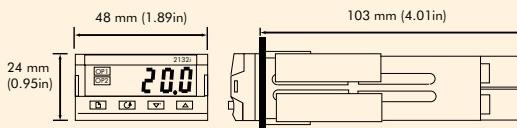
Calibration accuracy is maintained with a self-correcting input circuit. User calibration allows offsets to be applied to compensate for sensor and other system errors.

Features:

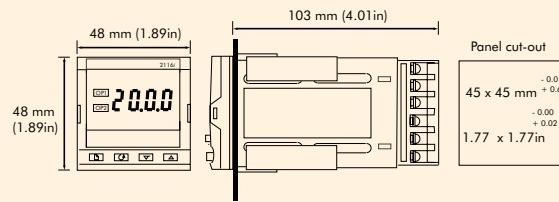
- | | |
|---|---|
| • Universal input | Covers a wide range of temperature and process inputs |
| • Three alarm setpoints | Separate warning and shut-down setpoints |
| • One or two alarm outputs | Alarm alert and shut-down outputs |
| • Front panel configuration | Easy, on-site set-up |
| • Wide-range 85-264V ac, or 20-29Vac/dc supply | Can be installed world-wide |
| • Plug-in from front | Rapid replacement - reducing downtime |
| • IP65 and NEMA 4X panel sealing | Can be used in wet and dusty atmospheres |
| • Meets European EMC and safety directives | Assured reliability in industrial environments |
| • Three year warranty | Low ownership cost |

Dimensions

2132i

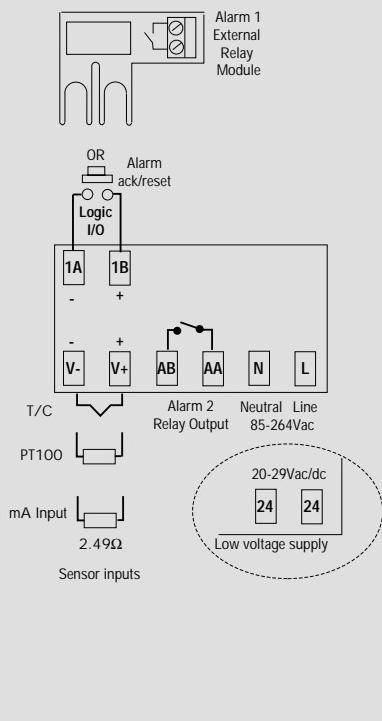


2116i

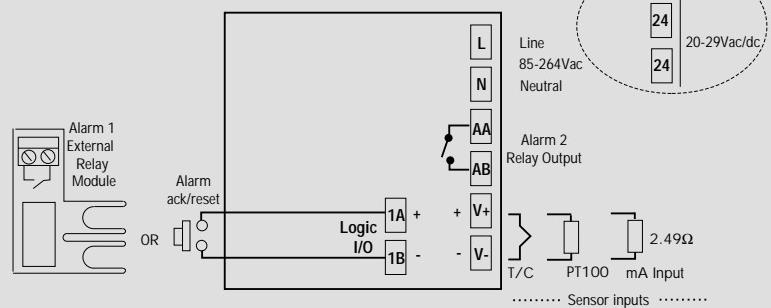


Electrical connections

2132i



2116i



Specifications

Display:

4 digit, green, 10mm high characters

Supply voltage:

85-264Vac, 48-62Hz, or 20-29Vac/dc, 5watts max

Operating ambients:

0-55°C, 5-95%RH non-condensing

Output ratings:

Logic: 9Vdc, 12mA (non-isolated)
(Can be used as alarm output or alarm acknowledgement input)
Relay: 2A, 264V ac resistive

Calibration accuracy:

± 1°C or ± 0.25% of reading whichever is greater

Cold junction compensation:

>30 to 1 rejection of ambient temperature change

Input filtering:

Off-999.9 seconds

EMC standards:

Meets generic emissions standard EN50091-2 and immunity standard EN50082-2 for industrial environments

Safety standard:

Meets EN61010, installation category II Pollution degree 2

Atmospheres:

Not suitable for use above 2000m or in explosive or corrosive atmospheres

Ordering Code

Model Number	Function	Supply Voltage	Manual	Logic I/O	Alarm 2 Relay O/P	Sensor Input	Setpoint Min.	Setpoint Max.	Units	Ext. Relay Module	Input Adaptor
2132i	note 1										
2116i											

Function

ND	Indicator only (Logic I/O and Alarm relay will not be fitted)
AL	Indicator/alarm unit (Logic I/O and alarm output fitted)

Supply Voltage

VH	85-264Vac
VL	20-29V dc or ac

Manual

XXX	No manual
ENG	English
FRA	French
GER	German
NED	Dutch
SPA	Spanish
SWE	Swedish
ITA	Italian

Logic I/O

XX	Disabled (note 1)
	Logic input
AC	Alarm ack/reset
KL	Keylock
	Non-latched alarm
FH	High alarm 1
FL	Low alarm 1
	Latched alarm
HA	High alarm 1
LA	Low alarm 1
NW	New alarm

Alarm 2 Relay Output

XX	Disabled (note 1)
	Non-latched alarm
FH	High alarm 2
FL	Low alarm 2
AL	High alarm 2 & low alarm 3
	Latched alarm
HA	High alarm 2
LA	Low alarm 2
AL	High alarm 2 & low alarm 3
NW	New alarm

Sensor Input

Thermocouples	°C	°F
J	Type J	-210 to 1200
K	Type K	-200 to 1372
T	Type T	-200 to 400
L	Type L	-200 to 900
N	Type N	-200 to 1300
R	Type R	-50 to 1768
S	Type S	-50 to 1768
B	Type B	-0 to 1820
P	Platinell II	0 to 1369
Z	Pt100	-200 to 850
		-325 to 1562
Resistance thermometer		
C	Type C - W5%Re/W26%Re (default custom sensor)	0 to 2319
D	Type D - W3%Re/W25%Re	0 to 2399
E	E Thermocouple	-200 to 999
1	NI/Ni18%Mo	0 to 1399
2	Pt20%Rh/Pt40%Rh	0 to 1870
3	W/W26%Re (Engelhard)	0 to 2000
4	W/W26%Re (Hoskins)	0 to 2010
5	W5%Re/W26%Re (Engelhard)	0 to 2300
6	W5%Re/W26%Re (Bucose)	0 to 2000
7	Pt10%Rh/Pt40%Rh	200 to 1800
8	Exegen K80 I.R. pyrometer	-45 to 650
Process inputs (linear)		
M	.9.99 to +80mV	Scalable -1999 to 9999
Y	0 to 20mA (note 3)	Scalable -1999 to 9999
A	4 to 20mA (note 3)	Scalable -1999 to 9999
V	0 to 10Vdc (input adapter required)	Scalable -1999 to 9999

Setpoint Min/Max

C	°C
F	°F
K	Kelvin
X	Linear input

External Relay Module

XX	Not fitted
R7	Fitted (Operated by the logic output)

Input Adaptor

V1	0-10Vdc
A1	0-20mA sense resistor (2.49Ω, 0.1%)

Note 1. If 'ND' (Indicator only) is specified in the function field then 'XX' must be entered in the Logic Input/output field and the Alarm 2 Relay field.

Note 2. Setpoint min and max: include the decimal position required in the display value; up to one for temperature input, up to two for process inputs.

Note 3. An external 1% current sense resistor is supplied as standard. If greater accuracy is required specify 'A1' in the Input Adaptor field.

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